


```
Matches 93; Conservative 13; Mismatches 7; Indels 5; Gaps 1;
QY 2 ESGPGLVKAQTLISLCANVGSGSIRSGGYWMSWIRHFGKGLFWIGYIHSGNTYVNSPL 61
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 6 ESGPGLVKAQTLISLCANVGSGSIRSGGYWMSWIRHFGKGLFWIGYIHSGNTYVNSPL 65
QY 62 KSRIVMSVDTSENKFSIRLNSVTAADTAAYVYCARL-----DGYTLDIWGGGTLVTWSS 114
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 66 KSRVITISVDTSENKFSIRLNSVTAADTAAYVYCARVLLMFGEVDYGVDMVGQGTVTWVSS 123

RESULT 12
ADP03870
ID ADP03870 standard; protein; 123 AA.
XX
AC ADP03870;
XX
DT 29-JUL-2004 (first entry)
XX
DE Murine-expressed anti-human CA IX monoclonal antibody VH protein -SEQ 10.
XX
KM monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
KM cytosolic; colorectal neoplasm; renal cell carcinoma;
KM cervical intraepithelial squamous neoplasia;
KM cervical intraepithelial glandular neoplasia; oesophageal; breast cancer;
KM gene therapy; murine; mouse; human; heavy chain variable domain.
XX
OS Unidentified.
XX
PN MO2003048328-A2.
XX
PD 12-JUN-2003.
XX
PF 02-DEC-2002; 2002MO-US038550.
XX
PR 03-DEC-2001; 2001US-0337275P.
XX
PA (ABGE-) ABGENIX INC.
XX
PI Gudas J, Foltz I, Handa M, Gallo M;
XX
DR WPI; 2003-523295/49.
XX
PT New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
PT colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
PT intraepithelial squamous and glandular neoplasia or esophageal tumors.
XX
PS Claim 1; SEQ ID NO 10; 89pp; English.
XX
CC The invention relates to a novel isolated monoclonal antibody (mAb)
CC comprising a heavy chain polypeptide and light chain polypeptide having a
CC sequence chosen from one of 53 fully defined amino acid sequences given
CC in the specification, where the antibody specifically binds carbonic
CC anhydrase IX (CA IX) tumour antigen. The antibody of the invention
CC demonstrates cytosolic activity and may be useful for treating a tumour,
CC such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
CC cervical intraepithelial squamous and glandular neoplasia, oesophageal
CC tumour or breast cancer, possibly via gene therapy. The current sequence
CC is that of a murine-expressed anti-human CA IX monoclonal antibody VH
CC (heavy chain variable domain) protein of the invention. The protein was
CC generated via the introduction of the human CA IX protein into a
CC transgenic mouse strain.
XX
SQ Sequence 123 AA;
Query Match 83.5%; Score 508.5; DB 7; Length 123;
Best Local Similarity 80.5%; Pred. No. 6.5e-39;
Matches 95; Conservative 10; Mismatches 8; Indels 5; Gaps 1;
QY 2 ESGPGLVKAQTLISLCANVGSGSIRSGGYWMSWIRHFGKGLFWIGYIHSGNTYVNSPL 61
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 6 ESGPGLVKAQTLISLCANVGSGSIRSGGYWMSWIRHFGKGLFWIGYIHSGNTYVNSPL 65
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QY 62 KSRIVMSVDTSENKFSIRLNSVTAADTAAYVYCARL-----DGYTLDIWGGGTLVTWSS 114
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 66 KSRVITISVDTSENKFSIRLNSVTAADTAAYVYCARAGKYGSGSYLDYMGQGTVTWVSS 123

RESULT 13
ADP03879
ID ADP03879 standard; protein; 123 AA.
XX
AC ADP03879;
XX
DT 29-JUL-2004 (first entry)
XX
DE Murine-expressed anti-human CA IX monoclonal antibody VH protein -SEQ 19.
XX
KM monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
KM cytosolic; colorectal neoplasm; renal cell carcinoma;
KM cervical intraepithelial squamous neoplasia;
KM cervical intraepithelial glandular neoplasia; oesophageal; breast cancer;
KM gene therapy; murine; mouse; human; heavy chain variable domain.
XX
OS Unidentified.
XX
PN MO2003048328-A2.
XX
PD 12-JUN-2003.
XX
PF 02-DEC-2002; 2002MO-US038550.
XX
PR 03-DEC-2001; 2001US-0337275P.
XX
PA (ABGE-) ABGENIX INC.
XX
PI Gudas J, Foltz I, Handa M, Gallo M;
XX
DR WPI; 2003-523295/49.
XX
PT New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
PT colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
PT intraepithelial squamous and glandular neoplasia or esophageal tumors.
XX
PS Claim 1; SEQ ID NO 19; 89pp; English.
XX
CC The invention relates to a novel isolated monoclonal antibody (mAb)
CC comprising a heavy chain polypeptide and light chain polypeptide having a
CC sequence chosen from one of 53 fully defined amino acid sequences given
CC in the specification, where the antibody specifically binds carbonic
CC anhydrase IX (CA IX) tumour antigen. The antibody of the invention
CC demonstrates cytosolic activity and may be useful for treating a tumour,
CC such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
CC cervical intraepithelial squamous and glandular neoplasia, oesophageal
CC tumour or breast cancer, possibly via gene therapy. The current sequence
CC is that of a murine-expressed anti-human CA IX monoclonal antibody VH
CC (heavy chain variable domain) protein of the invention. The protein was
CC generated via the introduction of the human CA IX protein into a
CC transgenic mouse strain.
XX
SQ Sequence 123 AA;
Query Match 83.5%; Score 508.5; DB 7; Length 123;
Best Local Similarity 80.5%; Pred. No. 6.5e-39;
Matches 95; Conservative 10; Mismatches 8; Indels 5; Gaps 1;
QY 2 ESGPGLVKAQTLISLCANVGSGSIRSGGYWMSWIRHFGKGLFWIGYIHSGNTYVNSPL 61
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 6 ESGPGLVKAQTLISLCANVGSGSIRSGGYWMSWIRHFGKGLFWIGYIHSGNTYVNSPL 65
QY 62 KSRIVMSVDTSENKFSIRLNSVTAADTAAYVYCAR-----LDGYTLDIWGGGTLVTWSS 114
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 66 KSRVITISVDTSENKFSIRLNSVTAADTAAYVYCARERTVDTYVGLDMVGQGTVTWVSS 123

RESULT 14
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CC such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
CC cervical intraepithelial squamous and glandular neoplasia, oesophageal
CC tumour or breast cancer, possibly via gene therapy. The current sequence
CC is that of a murine-expressed anti-human CA IX monoclonal antibody VH
CC (heavy chain variable domain) protein of the invention. The protein was
CC generated via the introduction of the human CA IX protein into a
CC transgenic mouse strain.
XX
SQ Sequence 120 AA;
Query Match 84.1%; Score 512; DB 7; Length 120;
Best Local Similarity 81.9%; Pred. No. 3e-39;
Matches 95; Conservative 12; Mismatches 5; Indels 4; Gaps 2;
QY 2 ESGPLVPAQTLISLSCAVSGSIRSGYMSWIRQHPKGLKLEWIGYIHSGNTYNSL 61
DB 6 ESGPLVPSQTLISLTCVSGSISGGYMSWIRQHPKGLKLEWIGYIHSGTYNSL 65
QY 62 KSRIAMSVDTSENKFSRLNSVTADTVAVYCARLDGYT--LDIWGGTLVTYSS 114
DB 66 KSRVTSVDTSKNPSLKLSSVTADTVAVYCAR-DGYNMYFPLMGKTLVTYSS 120
RESULT 10
ID ADP03873 standard; protein; 120 AA.
XX
AC ADP03873;
XX
DT 29-JUL-2004 (first entry)
XX
DE Murine-expressed anti-human CA IX monoclonal antibody VH protein -SEQ 13.
XX
OS monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
XX cytosolic; colorectal neoplasm; renal cell carcinoma;
XX cervical intraepithelial squamous neoplasia;
XX cervical intraepithelial glandular neoplasia; breast cancer;
XX gene therapy; murine; mouse; human; heavy chain variable domain.
XX
OS Unidentified.
XX
PN WO2003048328-A2.
XX
PD 12-JUN-2003.
XX
PF 02-DEC-2002; 2002WO-US038550.
XX
PR 03-DEC-2001; 2001US-0337275P.
XX
PA (ABGE-) ABGENIX INC.
XX
PI Gudas J, Foltz I, Handa M, Gallo M;
XX
DR WPI; 2003-523295/49.
XX
PT New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
PT colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
PT intraepithelial squamous and glandular neoplasia or esophageal tumors.
XX
PS Claim 1; SEQ ID NO 13; 89pp; English.
XX
CC The invention relates to a novel isolated monoclonal antibody (mab)
CC comprising a heavy chain polypeptide and light chain polypeptide having a
CC sequence chosen from one of 53 fully defined amino acid sequences given
CC in the specification, where the antibody specifically binds carbonic
CC anhydrase IX (CA IX) tumour antigen. The antibody of the invention
CC demonstrates cytostatic activity and may be useful for treating a tumour,
CC such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
CC cervical intraepithelial squamous and glandular neoplasia, oesophageal
CC tumour or breast cancer, possibly via gene therapy. The current sequence
CC is that of a murine-expressed anti-human CA IX monoclonal antibody VH
CC (heavy chain variable domain) protein of the invention. The protein was
CC generated via the introduction of the human CA IX protein into a

CC transgenic mouse strain.
XX
SQ Sequence 120 AA;
Query Match 84.1%; Score 512; DB 7; Length 120;
Best Local Similarity 81.9%; Pred. No. 3e-39;
Matches 95; Conservative 12; Mismatches 5; Indels 4; Gaps 2;
QY 2 ESGPLVPAQTLISLSCAVSGSIRSGYMSWIRQHPKGLKLEWIGYIHSGNTYNSL 61
DB 6 ESGPLVPSQTLISLTCVSGSISGGYMSWIRQHPKGLKLEWIGYIHSGTYNSL 65
QY 62 KSRIAMSVDTSENKFSRLNSVTADTVAVYCARLDGYT--LDIWGGTLVTYSS 114
DB 66 KSRVTSVDTSKNPSLKLSSVTADTVAVYCAR-DGYNMYFPLMGKTLVTYSS 120
RESULT 11
ID ADP03872 standard; protein; 123 AA.
XX
AC ADP03872;
XX
DT 29-JUL-2004 (first entry)
XX
DE Murine-expressed anti-human CA IX monoclonal antibody VH protein -SEQ 12.
XX
OS monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
XX cytosolic; colorectal neoplasm; renal cell carcinoma;
XX cervical intraepithelial squamous neoplasia;
XX cervical intraepithelial glandular neoplasia; breast cancer;
XX gene therapy; murine; mouse; human; heavy chain variable domain.
XX
OS Unidentified.
XX
PN WO2003048328-A2.
XX
PD 12-JUN-2003.
XX
PF 02-DEC-2002; 2002WO-US038550.
XX
PR 03-DEC-2001; 2001US-0337275P.
XX
PA (ABGE-) ABGENIX INC.
XX
PI Gudas J, Foltz I, Handa M, Gallo M;
XX
DR WPI; 2003-523295/49.
XX
PT New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
PT colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
PT intraepithelial squamous and glandular neoplasia or esophageal tumors.
XX
PS Claim 1; SEQ ID NO 12; 89pp; English.
XX
CC The invention relates to a novel isolated monoclonal antibody (mab)
CC comprising a heavy chain polypeptide and light chain polypeptide having a
CC sequence chosen from one of 53 fully defined amino acid sequences given
CC in the specification, where the antibody specifically binds carbonic
CC anhydrase IX (CA IX) tumour antigen. The antibody of the invention
CC demonstrates cytostatic activity and may be useful for treating a tumour,
CC such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
CC cervical intraepithelial squamous and glandular neoplasia, oesophageal
CC tumour or breast cancer, possibly via gene therapy. The current sequence
CC is that of a murine-expressed anti-human CA IX monoclonal antibody VH
CC (heavy chain variable domain) protein of the invention. The protein was
CC generated via the introduction of the human CA IX protein into a
CC transgenic mouse strain.
XX
SQ Sequence 123 AA;
Query Match 83.7%; Score 509.5; DB 7; Length 123;
Best Local Similarity 78.8%; Pred. No. 5.2e-39;

PT New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
 PT colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
 PT intraepithelial squamous and glandular neoplasia or esophageal tumors.
 XX
 PS Example 2; SEQ ID NO 151; 89pp; English.
 XX
 CC The invention relates to a novel isolated monoclonal antibody (mab)
 CC comprising a heavy chain polypeptide and light chain polypeptide having a
 CC sequence chosen from one of 53 fully defined amino acid sequences given
 CC in the specification, where the antibody specifically binds carbonic
 CC anhydrase IX (CA IX) tumour antigen. The antibody of the invention
 CC demonstrates cytostatic activity and may be useful for treating a tumour,
 CC such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
 CC cervical intraepithelial squamous and glandular neoplasia, oesophageal
 CC tumour or breast cancer, possibly via gene therapy. The current sequence
 CC is that of a murine-expressed anti-human CA IX monoclonal antibody VH
 CC (heavy chain variable domain) protein of the invention. The protein was
 CC generated via the introduction of the human CA IX protein into a
 CC transgenic mouse strain.
 CC
 XX
 SQ Sequence 121 AA;
 Query Match 84.5%; Score 514.5; DB 7; Length 121;
 Best Local Similarity 81.0%; Pred. No. 1.8e-39;
 Matches 94; Conservative 13; Mismatches 6; Indels 3; Gaps 1;
 QY 2 ESGPGLVPAQTSLSCAVSGSIRSGGYWSWIRHFGKLEWIGYIYHSGNTYNPSTL 61
 DB 6 ESGPGLVPAQTSLSCAVSGSIRSGGYWSWIRHFGKLEWIGYIYHSGNTYNPSTL 65
 QY 62 KSRVITISVDTSKNQFSLKLSVTADTAIVYCARLDMFGYGMVWGQGLTVTVSS 114
 DB 66 KSRVITISVDTSKNQFSLKLSVTADTAIVYCARLDMFGYGMVWGQGLTVTVSS 121
 QY 62 KSRVITISVDTSKNQFSLKLSVTADTAIVYCARLDMFGYGMVWGQGLTVTVSS 114
 DB 66 KSRVITISVDTSKNQFSLKLSVTADTAIVYCARLDMFGYGMVWGQGLTVTVSS 121
 RESULT 8
 ADP03968
 ID ADF03968 standard; protein; 118 AA.
 XX
 AC ADF03968;
 XX
 DT 29-JUN-2004 (first entry)
 XX
 DE Murine-expressed anti-human CA IX monoclonal antibody VH protein SEQ 138.
 XX
 KM monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
 KM cytostatic; colorectal neoplasm; renal cell carcinoma;
 KM cervical intraepithelial squamous neoplasia;
 KM cervical intraepithelial glandular neoplasia; oesophageal; breast cancer;
 KM gene therapy; murine; mouse; human; heavy chain variable domain.
 XX
 OS Unidentified.
 XX
 PN WO2003048328-A2.
 XX
 PD 12-JUN-2003.
 XX
 PF 02-DEC-2002; 2002WO-US038550.
 XX
 PR 03-DEC-2001; 2001US-0337275P.
 XX
 PA (ABGE-) ABGENIX INC.
 XX
 PI Gudus J, Foltz I, Handa M, Gallo M;
 XX
 DR WPI; 2003-523295/49.
 XX
 XX New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
 PT colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
 PT intraepithelial squamous and glandular neoplasia or esophageal tumors.
 XX
 XX Example 2; SEQ ID NO 138; 89pp; English.

CC The invention relates to a novel isolated monoclonal antibody (mab)
 CC comprising a heavy chain polypeptide and light chain polypeptide having a
 CC sequence chosen from one of 53 fully defined amino acid sequences given
 CC in the specification, where the antibody specifically binds carbonic
 CC anhydrase IX (CA IX) tumour antigen. The antibody of the invention
 CC demonstrates cytostatic activity and may be useful for treating a tumour,
 CC such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
 CC cervical intraepithelial squamous and glandular neoplasia, oesophageal
 CC tumour or breast cancer, possibly via gene therapy. The current sequence
 CC is that of a murine-expressed anti-human CA IX monoclonal antibody VH
 CC (heavy chain variable domain) protein of the invention. The protein was
 CC generated via the introduction of the human CA IX protein into a
 CC transgenic mouse strain.
 CC
 XX
 SQ Sequence 118 AA;
 Query Match 84.1%; Score 512; DB 7; Length 118;
 Best Local Similarity 83.2%; Pred. No. 3e-39;
 Matches 94; Conservative 10; Mismatches 9; Indels 0; Gaps 0;
 QY 2 ESGPGLVPAQTSLSCAVSGSIRSGGYWSWIRHFGKLEWIGYIYHSGNTYNPSTL 61
 DB 6 ESGPGLVPAQTSLSCAVSGSIRSGGYWSWIRHFGKLEWIGYIYHSGNTYNPSTL 65
 QY 62 KSRVITISVDTSKNQFSLKLSVTADTAIVYCARLDMFGYGMVWGQGLTVTVSS 114
 DB 66 KSRVITISVDTSKNQFSLKLSVTADTAIVYCARLDMFGYGMVWGQGLTVTVSS 118
 QY 62 KSRVITISVDTSKNQFSLKLSVTADTAIVYCARLDMFGYGMVWGQGLTVTVSS 114
 DB 66 KSRVITISVDTSKNQFSLKLSVTADTAIVYCARLDMFGYGMVWGQGLTVTVSS 118
 RESULT 9
 ADP03974
 ID ADF03974 standard; protein; 120 AA.
 XX
 AC ADF03974;
 XX
 DT 29-JUN-2004 (first entry)
 XX
 DE Murine-expressed anti-human CA IX monoclonal antibody VH protein SEQ 144.
 XX
 KM monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
 KM cytostatic; colorectal neoplasm; renal cell carcinoma;
 KM cervical intraepithelial squamous neoplasia;
 KM cervical intraepithelial glandular neoplasia; oesophageal; breast cancer;
 KM gene therapy; murine; mouse; human; heavy chain variable domain.
 XX
 OS Unidentified.
 XX
 PN WO2003048328-A2.
 XX
 PD 12-JUN-2003.
 XX
 PF 02-DEC-2002; 2002WO-US038550.
 XX
 PR 03-DEC-2001; 2001US-0337275P.
 XX
 PA (ABGE-) ABGENIX INC.
 XX
 PI Gudus J, Foltz I, Handa M, Gallo M;
 XX
 DR WPI; 2003-523295/49.
 XX
 XX New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
 PT colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
 PT intraepithelial squamous and glandular neoplasia or esophageal tumors.
 XX
 XX Example 2; SEQ ID NO 144; 89pp; English.
 CC The invention relates to a novel isolated monoclonal antibody (mab)
 CC comprising a heavy chain polypeptide and light chain polypeptide having a
 CC sequence chosen from one of 53 fully defined amino acid sequences given
 CC in the specification, where the antibody specifically binds carbonic
 CC anhydrase IX (CA IX) tumour antigen. The antibody of the invention
 CC demonstrates cytostatic activity and may be useful for treating a tumour,

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PD 12-JUN-2003.
XX
XX 02-DEC-2002; 2002MO-US038550.
XX
XX 03-DEC-2001; 2001US-0337275P.
XX
XX (ABGE-) ABGENIX INC.
XX
XX Gudas J, Foltz I, Handa M, Gallo M,
XX WPI; 2003-523295/49.
XX
XX New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
XX colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
XX intraepithelial squamous and glandular neoplasia or esophageal tumors.
XX
XX Example 2; SEQ ID NO 152; 89pp; English.
XX
XX The invention relates to a novel isolated monoclonal antibody (mAb)
XX comprising a heavy chain polypeptide and light chain polypeptide having a
XX sequence chosen from one of 53 fully defined amino acid sequences given
XX in the specification, where the antibody specifically binds carbonic
XX anhydrase IX (CA IX) tumour antigen. The antibody of the invention
XX demonstrates cytostatic activity and may be useful for treating a tumour,
XX such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
XX cervical intraepithelial squamous and glandular neoplasia, oesophageal
XX tumour or breast cancer, possibly via gene therapy. The current sequence
XX is that of a murine-expressed anti-human CA IX monoclonal antibody VH
XX (heavy chain variable domain) protein of the invention. The protein was
XX generated via the introduction of the human CA IX protein into a
XX transgenic mouse strain.
XX
XX Sequence 121 AA;
XX
XX Query Match 85.1%; Score 518.5; DB 7; Length 121;
XX Best Local Similarity 81.9%; Pred. No. 7.7e-40;
XX Matches 95; Conservative 11; Mismatches 7; Indels 3; Gaps 1;
XX
XX QY 2 BSGPGLVPRPQTLISCAVSGSIRSGGYWMSWIRHPEKGLIEWIGYTHSGNTYINPSL 61
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
XX 6 BSGPGLVPRPQTLISCAVSGSIRSGGYWMSWIRHPEKGLIEWIGYTHSGNTYINPSL 65
XX
XX DB 62 KSRIKMSVDTSENKFSRLNSVTADTAVYVCARLD---GYTLDMWGQGLTWTVSS 114
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
XX 66 KSRVITISVDTSKNPSLKLSSVTADTAVYVCARYIDILGTAFPDIMWGQMTWTVSS 121
XX
XX RESULT 6
XX ADP03871
XX ID ADP03871 standard; protein; 125 AA.
XX
XX AC ADP03871;
XX
XX DT 29-JUL-2004 (first entry)
XX
XX DE Murine-expressed anti-human CA IX monoclonal antibody VH protein -SEQ 11.
XX
XX KW monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
XX cytosolic; colorectal neoplasm; renal cell carcinoma;
XX cervical intraepithelial squamous neoplasia;
XX cervical intraepithelial glandular neoplasia; oesophageal; breast cancer;
XX gene therapy; murine; mouse; human; heavy chain variable domain.
XX
XX OS Unidentified.
XX
XX PN WO2003048328-A2.
XX
XX PD 12-JUN-2003.
XX
XX PF 02-DEC-2002; 2002MO-US038550.
XX
XX PR 03-DEC-2001; 2001US-0337275P.
XX
XX
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PA (ABGE-) ABGENIX INC.
XX
XX Gudas J, Foltz I, Handa M, Gallo M,
XX WPI; 2003-523295/49.
XX
XX New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
XX colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
XX intraepithelial squamous and glandular neoplasia or esophageal tumors.
XX
XX Claim 1; SEQ ID NO 11; 89pp; English.
XX
XX The invention relates to a novel isolated monoclonal antibody (mAb)
XX comprising a heavy chain polypeptide and light chain polypeptide having a
XX sequence chosen from one of 53 fully defined amino acid sequences given
XX in the specification, where the antibody specifically binds carbonic
XX anhydrase IX (CA IX) tumour antigen. The antibody of the invention
XX demonstrates cytostatic activity and may be useful for treating a tumour,
XX such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
XX cervical intraepithelial squamous and glandular neoplasia, oesophageal
XX tumour or breast cancer, possibly via gene therapy. The current sequence
XX is that of a murine-expressed anti-human CA IX monoclonal antibody VH
XX (heavy chain variable domain) protein of the invention. The protein was
XX generated via the introduction of the human CA IX protein into a
XX transgenic mouse strain.
XX
XX Sequence 125 AA;
XX
XX Query Match 85.0%; Score 517.5; DB 7; Length 125;
XX Best Local Similarity 81.7%; Pred. No. 9.8e-40;
XX Matches 98; Conservative 9; Mismatches 6; Indels 7; Gaps 2;
XX
XX QY 2 BSGPGLVPRPQTLISCAVSGSIRSGGYWMSWIRHPEKGLIEWIGYTHSGNTYINPSL 61
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
XX 6 BSGPGLVPRPQTLISCAVSGSIRSGGYWMSWIRHPEKGLIEWIGYTHSGNTYINPSL 65
XX
XX DB 62 KSRIKMSVDTSENKFSRLNSVTADTAVYVCAR----LDGY--TLDIMWGQGLTWTVSS 114
XX |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
XX 66 KSRITISVDTSKNPSLKLSSVTADTAVYVCARYIDILGTAFPDIMWGQMTWTVSS 125
XX
XX RESULT 7
XX ADP03981
XX ID ADP03981 standard; protein; 121 AA.
XX
XX AC ADP03981;
XX
XX DT 29-JUL-2004 (first entry)
XX
XX DE Murine-expressed anti-human CA IX monoclonal antibody VH protein SEQ 151.
XX
XX KW monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
XX cytosolic; colorectal neoplasm; renal cell carcinoma;
XX cervical intraepithelial squamous neoplasia;
XX cervical intraepithelial glandular neoplasia; oesophageal; breast cancer;
XX gene therapy; murine; mouse; human; heavy chain variable domain.
XX
XX OS Unidentified.
XX
XX PN WO2003048328-A2.
XX
XX PD 12-JUN-2003.
XX
XX PF 02-DEC-2002; 2002MO-US038550.
XX
XX PR 03-DEC-2001; 2001US-0337275P.
XX
XX (ABGE-) ABGENIX INC.
XX
XX Gudas J, Foltz I, Handa M, Gallo M,
XX WPI; 2003-523295/49.
XX
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FT      Region /note= "FR3 region"
FT      96. .103
FT      /note= "CDR2 region"
FT      Region 104. .114
FT      /note= "FR4 region"
XX
XX      WO200253595-A1.
XX
XX      11-JUL-2002.
XX
XX      27-DEC-2001; 2001WO-SE002908.
XX
XX      29-DEC-2000; 2000SE-00004892.
XX
XX      (PHAA ) PHARMACIA DIAGNOSTICS AB.
XX
XX      Flicker S, Steinberger P, Kraft D, Valenta R;
XX
XX      WPI; 2002-583604/62.
XX
XX      N-PSDB; ABK89638.
XX
XX      Group 2 allergen-specific immunoglobulins (Ig) E Fabs or IgG comprising
PT      variable region of group 2 allergen specific-human IgE Fabs, useful for
PT      diagnosing or passive immunotherapy of type I allergy, for environmental
PT      allergen detection.
XX
XX      Disclosure; Page 37; 45pp; English.
XX
XX      This invention relates to the DNA and protein sequences of group 2
CC      allergen-specific human IgE Fabs and methods for their use. The proteins
CC      of the invention may have antiallergic activities and may be used as a
CC      vaccine or an inhibitor of binding of grass pollen allergenic patient's IgE
CC      antibodies to Phi p 2 (a major timothy grass pollen allergen). The group
CC      2 allergen-specific fabs of the invention may be useful for environmental
CC      allergen detection and for standardisation of allergen extracts. The fabs
CC      - or a vaccine against a type I allergy is useful for passive
CC      immunotherapy of type I allergy, it is also useful for diagnosing a type
CC      I allergy. The allergen-specific fabs of the invention are useful for
CC      inter alia, diagnosis, therapy and prevention of type I allergy. They are
CC      also useful for identification of group 2 allergen-containing pollen and
CC      may be used for blocking the binding of grass pollen allergenic patients
CC      IgE antibodies to Phi p 2. The present sequence represents the human IgG
CC      fab, clone 60 heavy chain protein of the invention
XX
XX      Sequence 114 AA:
SQ
Query Match      89.7%; Score 546; DB 5; Length 114;
Best Local Similarity 89.5%; Pred. No. 2.2e-42;
Matches 102; Conservative 4; Mismatches 8; Indels 0; Gaps 0;
QY      1 LESGPGLVKPAQTLSLSCAVSGSIRSGGYWMIROHPGKLEWIGIYHSGMTYYNPS 60
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB      1 LESGPGLVKPSQTLSLCTVSGSIRSGGYWMIROHPGKLEWIGIYHSGMTYYNPS 60
QY      61 LKSHIAMSVDTSSENKFSILRLNSVTADTAIVYYCARLDGYTLDIWGQGLTVTVSS 114
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB      61 LKSRITWSVDTSKMFSLRLTSVTADTAIVYYCARSDGYTLDMNGQGLTVTVSS 114
XX
XX      RESULT 4
XX      ADP03977
XX      ID ADP03977 standard; protein; 122 AA.
XX
XX      ADP03977;
XX
XX      29-JUL-2004 (first entry)
XX
XX      Murine-expressed anti-human CA IX monoclonal antibody VH protein SEQ 147.
XX
XX      monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
XX      cytosolic; colorectal neoplasm; renal cell carcinoma;
XX      cervical intraepithelial squamous neoplasia;
XX      cervical intraepithelial glandular neoplasia; breast cancer;
XX

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KW      gene therapy; murine; mouse; human; heavy chain variable domain.
XX
XX      Undetected.
XX
XX      WO2003048328-A2.
XX
XX      12-JUN-2003.
XX
XX      02-DEC-2002; 2002WO-US038550.
XX
XX      03-DEC-2001; 2001US-0337275P.
XX
XX      (ABGE-) AGENIX INC.
XX
XX      Gudas J, Foltz I, Handa M, Gallo M;
XX
XX      WPI; 2003-523295/49.
XX
XX      New anti-CA IX monoclonal antibody, useful for treating a tumor e.g.,
PT      colorectal neoplasms, colorectal tumors, cervical carcinoma, cervical
PT      intraepithelial squamous and glandular neoplasia or esophageal tumors.
XX
XX      Example 2; SEQ ID NO 147; 89pp; English.
XX
XX      The invention relates to a novel isolated monoclonal antibody (mAb)
CC      comprising a heavy chain polypeptide and light chain polypeptide having a
CC      sequence chosen from one of 53 fully defined amino acid sequences given
CC      in the specification, where the antibody specifically binds carbonic
CC      anhydrase IX (CA IX) tumour antigen. The antibody of the invention
CC      demonstrates cytosolic activity and may be useful for treating a tumour,
CC      such as colorectal neoplasm, renal cell carcinoma, cervical carcinoma,
CC      cervical intraepithelial squamous and glandular neoplasia, oesophageal
CC      tumour or breast cancer, possibly via gene therapy. The current sequence
CC      is that of a murine-expressed anti-human CA IX monoclonal antibody VH
CC      (heavy chain variable domain) protein of the invention. The protein was
CC      generated via the introduction of the human CA IX protein into a
CC      transgenic mouse strain.
XX
XX      Sequence 122 AA:
SQ
Query Match      85.2%; Score 519; DB 7; Length 122;
Best Local Similarity 81.2%; Pred. No. 7e-40;
Matches 95; Conservative 12; Mismatches 6; Indels 4; Gaps 1;
QY      2 ESGPGLVKAQTLSLSCAVSGSIRSGGYWMIROHPGKLEWIGIYHSGMTYYNPSL 61
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB      6 ESGPGLVKAQTLSLCTVSGSIRSGGYWMIROHPGKLEWIGIYHSGMTYYNPSL 65
QY      62 KSRITWSVDTSSENKFSILRLNSVTADTAIVYYCAR---LDGYTLDIWGQGLTVTVSS 114
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB      66 KSRITWSVDTSKMFSLRLTSVTADTAIVYYCARYYDILGDMVWGQGLTVTVSS 122
XX
XX      RESULT 5
XX      ADP03982
XX      ID ADP03982 standard; protein; 121 AA.
XX
XX      ADP03982;
XX
XX      29-JUL-2004 (first entry)
XX
XX      Murine-expressed anti-human CA IX monoclonal antibody VH protein SEQ 152.
XX
XX      monoclonal antibody; carbonic anhydrase IX; CA IX tumour antigen;
XX      cytosolic; colorectal neoplasm; renal cell carcinoma;
XX      cervical intraepithelial squamous neoplasia;
XX      cervical intraepithelial glandular neoplasia; oesophageal; breast cancer;
XX      gene therapy; murine; mouse; human; heavy chain variable domain.
XX
XX      Undetected.
XX
XX      WO2003048328-A2.
XX

```


GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 3, 2006, 14:17:09 ; Search time 99.1455 Seconds
(without alignments)
505.209 Million cell updates/sec

Title: US-10-027-725A-7

Perfect score: 609 1 LESGPGLVKPAQTLSLSCAV.....RLDGYTLDIWGQGLTVTVSS 114

Sequence: BLOSUM62

Scoring table: Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_21:*

1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
9: geneseqp2005s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	609	100.0	114	5	ABG30445
2	547	89.8	114	5	ABG30447
3	546	89.7	114	5	ABG30446
4	519	85.2	122	7	ADP03977
5	518.5	85.1	121	7	ADP03982
6	517.5	85.0	125	7	ADP03981
7	514.5	84.5	121	7	ADP03981
8	512	84.1	118	7	ADP03968
9	512	84.1	120	7	ADP03974
10	512	84.1	120	7	ADP03873
11	509.5	83.7	123	7	ADP03872
12	508.5	83.5	123	7	ADP03870
13	508.5	83.5	123	7	ADP03879
14	508.5	83.5	123	7	ADP03878
15	508.5	83.5	125	7	ADP03868
16	508.5	83.5	125	7	ADP03876
17	508.5	83.5	144	9	ADP03876
18	506.5	83.2	119	7	ADP03961
19	506.5	83.2	123	2	AAW78433
20	506.5	83.2	123	5	ABR97976
21	506.5	83.2	123	7	ADG88414
22	505.5	83.0	119	7	ADP03970
23	505	82.9	252	5	ABP45983
24	505	82.9	252	7	ADG96810

25	504.5	82.8	125	7	ADP03983	Adp03983 Murine-ex
26	504.5	82.8	480	9	ADZ57697	Adz57697 Anti-cMet
27	504	82.8	120	7	ADP03969	Adp03969 Murine-ex
28	503.5	82.7	127	7	ADP03874	Adp03874 Murine-ex
29	503	82.6	124	7	ADP03935	Adp03935 Murine-ex
30	502	82.4	123	4	AAB62745	Aab62745 Human HIV
31	501.5	82.3	117	7	ADP03978	Adp03978 Anti-huma
32	501.5	82.3	117	7	ADP05388	Adp05388 Anti-MOC1
33	501.5	82.3	149	9	ADZ57713	Adz57713 Germanine
34	501	82.3	123	9	ADP03971	Adp03971 Human ant
35	500.5	82.2	251	6	ABU19829	Abu19829 Human VEG
36	500.5	82.2	251	8	ADH13871	Adh13871 Human vas
37	500.5	82.2	125	8	ADSL6556	Adsl6556 Human ant
38	500	82.1	120	4	AAB62775	Aab62775 Human HIV
39	499.5	81.9	473	4	AAB36206	Aab36206 Human imm
40	499	81.9	253	5	ABP45608	Abp45608 Human Bly
41	498.5	81.9	253	7	ADG96435	Adg96435 Single ch
42	498.5	81.9	253	7	ADG96435	Adg96435 Human ant
43	497.5	81.7	148	9	ADP03934	Adp03934 Murine-ex
44	497	81.6	110	7	ADP03934	Adp03934 Murine-ex
45	497	81.6	121	7	ADJ80377	Adj80377 Antibody

ALIGNMENTS

RESULT 1	ABG30445	ABG30445 standard; protein; 114 AA.
ID	ABG30445;	
XX	ABG30445;	
AC	ABG30445;	
DT	21-OCT-2002	(first entry)
XX		
DE	Human IGE Fab clone 94 heavy chain protein.	
XX		
KW	Human; fab; antiallergic; vaccine; grass pollen; Phi p 2;	
XX	timothy grass pollen allergen; passive immunotherapy.	
XX		
OS	Homo sapiens.	
XX		
FH	Key	Location/Qualifiers
FT	Region	1..26
FT	Region	/note= "FR1 region"
FT	Region	27..33
FT	Region	/note= "CDR1 region"
FT	Region	34..47
FT	Region	/note= "FR2 region"
FT	Region	48..63
FT	Region	/note= "CDR2 protein"
FT	Region	64..95
FT	Region	/note= "FR3 region"
FT	Region	96..103
FT	Region	/note= "CDR2 region"
FT	Region	104..114
FT	Region	/note= "FR4 region"
PN	WO200253595-A1.	
XX		
PD	11-JUL-2002.	
XX		
PF	27-DEC-2001; 2001WO-SE002908.	
XX		
PR	29-DEC-2000; 2000SE-00004892.	
XX		
PA	(PHAA) PHARMACIA DIAGNOSTICS AB.	
PI	Flicker S, Steinberger P, Kraft D, Valenta R;	
XX		
DR	WPI: 2002-583604/62.	
DR	N-PSDB; ABR89637.	
XX		
PT	Group 2 allergen-specific immunoglobulins (Ig) E Fabs or IGG comprising	